

PROJECT: Knapp Minor Subdivision

LEAD AGENCY: City of Trinidad
P.O. Box 390
Trinidad, CA 95570

LEAD AGENCY CONTACT PERSON:
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THIS INITIAL STUDY and CHECKLIST PREPARED BY:
City of Trinidad
P.O. Box 390
Trinidad, CA 95570
(707) 677-0223; FAX (707) 677-3759

PROJECT LOCATION: 80 Lanford Lane
Trinidad, CA 95570
APNs: 042-141-01; 515-151-22

PROJECT PROPONENT: Raymond Knapp

PROPERTY OWNER: Raymond Knapp

ZONING/GENERAL PLAN DESIGNATION: Suburban Residential (20,000 sq. ft. minimum parcel size)

PROJECT SUMMARY: This project proposes a minor subdivision of a 12.7 acre parcel into two parcels of approximately 2.0 acres (Parcel 1) and 10.7 acres (Parcel 2). Parcel 2 is currently developed with a primary and secondary residence. Proposed Parcel 1 is currently undeveloped. Both parcels have access via Lanford Road, a private road. City water currently serves the existing residences and will serve future development on Parcel 1. Both parcels will utilize on-site sewage disposal systems (OWTS). Suitable primary and reserve areas have been designated on proposed Parcel 1 and a suitable reserve area has been designated for the existing primary residence on Parcel 2, which already has a primary leachfield installed. The majority of the subject parcel is located within City of Trinidad, and the northern portion is located within the County of Humboldt jurisdiction. Subdivision applications have been submitted to both jurisdictions, with the City of Trinidad acting as the lead agency. All proposed development will take place within the City of Trinidad, will be served by City water and be subject to the City's land use regulations and the City's and the County's OWTS regulations.

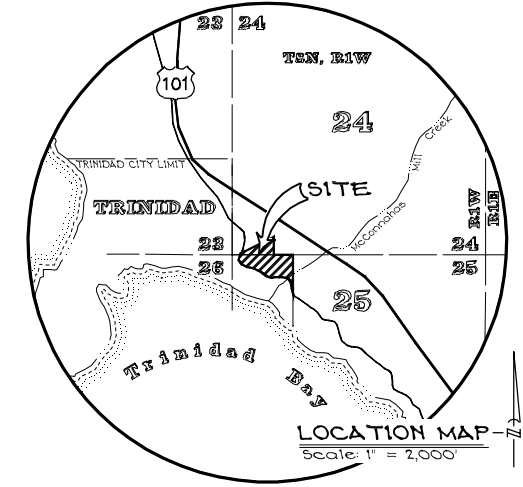
SURROUNDING LAND USES AND SETTING: The project is located east of Scenic Drive and south of Lanford Lane in an area developed exclusively with residential uses with generally 2 to 5 acre parcels. The Pacific Ocean is approximately 500 feet west of the project. Trinidad Rancheria is located just to the east of Parcel 2. The area is zoned and planned Suburban Residential by the City of Trinidad, specifying a minimum parcel size of 20,000 square feet. The County Plan designation is Residential Estates with a Zoning or Residential Single-Family, also with a 20,000 sq. ft. minimum lot size. The general plan / zoning designations are misleading since the area is not served by public sewer and the Humboldt County Health Department does not allow the creation of parcels in the County smaller than one acre when on-site sewage disposal is proposed.

FINDING OF NO SIGNIFICANT EFFECT: It has been determined, after review and evaluation, that the proposed project will conform to the City of Trinidad planning and implementation documents and will not have a significant adverse effect on the environment with mitigation incorporated.

PROJECT DESCRIPTION / SETTING:

- 1. PROJECT OVERVIEW:** This project proposes a minor subdivision of a 12.7 acre parcel into two parcels of approximately 2.0 acres (Parcel 1) and 10.7 acres (Parcel 2).
- 2. LOCATION / SETTING:** The project is located east of Scenic Drive and south of Lanford Lane in an area developed exclusively with residential uses. The Pacific Ocean is approximately 500 feet west of the project. The southern approximately two-thirds of the existing parcel is location within the City limits of the City of Trinidad; the remaining, northern one-third is location within Humboldt County jurisdiction. Trinidad Rancheria is located just to the east of Parcel 2. Parcel 1 is undeveloped, much of it consisting of generally flat pasture, and bordered by mature conifers. There is a steep break-in-slope on the western and southern sides of the project that drop down to Scenic Drive. Parcel 2 is developed with two residences and other related improvements. Much of the rest of Parcel 2 consists of mature conifers. McConnahas Mill Creek runs through the southeastern portion of Parcel 2.
- 3. DETAILED PROJECT DESCRIPTION:** This project proposes a minor subdivision of a 12.7 acre parcel into two parcels of approximately 2.0 acres (Parcel 1) and 10.7 acres (Parcel 2). Parcel 2 is currently developed with a primary and secondary residence, a workshop and two barns. Proposed Parcel 1 is currently undeveloped. Both parcels have access via Lanford Road, a private road. City water currently serves the existing residences and will serve future development on Parcel 1. Both parcels will utilize on-site sewage disposal systems. Suitable primary and reserve areas have been designated on proposed Parcel 1 and a suitable reserve area has been designated for the existing primary residence on Parcel 2, which already has a primary system installed. The majority of the subject parcel is located within City of Trinidad and a small, northern portion is located within the County of Humboldt jurisdiction. Subdivision applications have been submitted to both jurisdictions, with the City of Trinidad acting as the lead agency. All proposed development will take place within the City of Trinidad. The project site is located within an Alquist-Priolo Special Studies Zone. LACO Associates has completed a Fault Evaluation Study and determined that there is a suitable building area on proposed Parcel 1.

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GENERAL NOTES

1. This application proposes a minor subdivision of APNs 515-151-022 and 042-141-001, a 13± acre parcel into two parcels. The subject parcel is located partially in the City of Trinidad and partially in the County of Humboldt. All proposed development will take place within the City of Trinidad.
2. Within the City of Trinidad, the parcel has a general plan designation and zoning of suburban residential specifying 20,000 square foot minimum parcel size. In the County the parcel has a general plan designation of Residential Estates and is zoned Residential Single Family with a 20,000 square foot minimum parcel size and combining zones allowing manufactured homes and identifying potential Alquist Priolo Fault Hazard (R9-20-M/G).
3. Adjacent properties share similar zoning and general plan designations.
4. Proposed Parcel 1 is currently undeveloped. Proposed Parcel 2 is developed with two single family residences, a workshop and two barns.
5. The parcels are to be served by on-site sewage disposal systems. Testing for the system on proposed Parcel 1 and a reserve area on proposed Parcel 2 was conducted by Omsberg & Preston, dated May 2005.
6. The properties are within a mapped Alquist-Priolo Special Studies Zone. LACO Associates conducted an Alquist Priolo Fault evaluation study.
7. The properties are not shown on Official Maps (FIRM Community Parcel No. 060060-0450 B) as being subject to flooding.
8. No other hazardous areas, sensitive habitats, historic buildings or archaeological sites are known to exist on or adjacent to the property.
9. Contours shown are at 2' foot intervals and are based on a topographic survey performed by Omsberg & Preston dated October, 2006.
10. All easements of record are shown hereon & will appear on the recorded Parcel Map.

EASEMENTS & ENCUMBRANCES NOT SHOWN HEREON

1. An easement for a State Highway and a waiver of any claim for damages by reason of the location, construction, landscaping or maintenance of said highway per 154 Deeds 310.
2. An easement for a public highway granted to the County of Humboldt and a waiver of any claim for damages by reason of the location, construction, landscaping or maintenance of said highway per 448 OR 485. An additional waiver was recorded under 535 OR 395.
3. The effect of a variation in the bearings and distances shown on Book 22 of Surveys, Page 142 and Book 50 of Surveys, Page 104, with those shown hereon.

OWNER / APPLICANT
Ray Knapp
P.O. Box 300
Trinidad, CA 95570
(707) 677-3828

APN's 515-151-022 & 042-141-001

OMSBERG & PRESTON 304 'N' Street Eureka, California 95501 Telephone (707) 443-8651 Fax: 443-0422	DESIGNED BY	DATE	TENTATIVE MAP RAY KNAPP in the City of Trinidad SW 1/4 Section 24, NW 1/4 Section 25, T.8N, R.1W, H.M.	SCALE
	DRAWN BY	DATE		JOB NO.
	CHECKED BY	DATE		OG-1565-1
	SHEET	OF		
SURVEYORS PLANNERS ENGINEERS			1	1

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|---|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Agricultural Resources | <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities/Service Systems |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Population/Housing | <input checked="" type="checkbox"/> None |

DETERMINATION: (To be completed by the Lead Agency)
On the basis of this initial evaluation:

- ☐ I find that the proposed project **could not** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the proposed project **may** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- ☐ I find that the proposed project **may** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Trevor Parker, City Planner

City of Trinidad

Printed Name

For

CEQA Section 15183 (a) “mandates that projects which are consistent with the development density established by existing General plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant impacts which are peculiar to the project or its site. This project, as analyzed in this Initial Study, has been found to be consistent with the policies of both the City and the County the General Plans. This project area was contemplated in the General Plan for development and analyzed in an EIR. This project will be subject to the mitigation measures through the General Plan policies, as dictated by the EIR and as specified herein. CEQA Section 15162 (a). “Subsequent EIRs and Negative Declarations” states that.... (a) When an EIR has been certified no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of **substantial evidence** (emphasis added) in the light of the whole record, one or more of the following:...” This section continues with conditions that would require a Subsequent EIR. This project does not meet any of those conditions. The following document provides this examination.

CHECKLIST AND EVALUATION OF ENVIRONMENTAL IMPACTS: An explanation for all checklist responses are included in the section titled **DISCUSSION OF CHECKLIST RESPONSES**, which immediately follows the checklist. All answers take into account the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts. The explanation of each issue identifies (a) the significance criteria or threshold, if any, used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact too less than significance. In the **CHECKLIST** and the **DISCUSSION OF CHECKLIST RESPONSES**, the following definitions are used:

“No Impact” means that the effect does not apply to the proposed project, or clearly will not impact nor be impacted by the project.

“Less Than Significant Impact” means that the effect is less than significant and no mitigation is necessary to reduce the impact to a lesser level.

“Potentially Significant Unless Mitigation Incorporated” means the incorporation of one or more mitigation measures can reduce the effect from potentially significant to a less than significant level.

“Potentially Significant Impact” means there is substantial evidence that an effect may be significant.

1. AESTHETICS . Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			X	

1. a), b), c), d): AESTHETICS: *LESS THAN SIGNIFICANT IMPACT*

FINDING: The proposed subdivision will not have a substantial adverse effect on a scenic vista and will not substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway. The project will not substantially degrade the existing visual character or quality of the site and its surroundings and /or create a new source of light or glare which would adversely affect day or nighttime views in the area.

DISCUSSION:

- a) The project is not located in a designated scenic area and no scenic resources exist on the site. Although the entire Trinidad area could be considered scenic, the scenic vistas are generally towards the ocean. This site may be visible from some viewing locations such as from Trinidad Head. However, the site is designated for single-family residential development, consistent with neighboring low-density development.
- b) The proposed development is located above Scenic Drive and future development will not be visible from the road or the beach due to its elevation at 200 feet above mean sea level.
- c) See 'a' and 'b' above. The proposed building site is in a meadow surrounded by existing trees and will not be generally visible from the surrounding areas. Some vegetation may be removed in the future to improve views from the site. Removal of large trees over 12" d.b.h. would require approval of a Use Permit through the City of Trinidad or County of Humboldt.
- d) Development of one additional house will create an insignificant increase in lighting typical of a single family residence. Due to the size of the lot, it is not likely that light will leave the property.

2. AGRICULTURE RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X

2. a), b), c) AGRICULTURAL RESOURCES – NO IMPACT

FINDING: The proposed subdivision will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use; will not conflict with existing zoning for agricultural use, or a Williamson Act contract; and will not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use.

DISCUSSION:

- a) The property is not Prime Farmland, Unique Farmland or Farmland of Statewide importance.
- b) The project area is currently developed with strictly residential uses. The property is planned and zoned for residential use and is not subject to a Williamson Act contract. There is no agricultural zoning in the area.
- c) See a) and b) above. Other than forestry, and some grazing, there are no significant agricultural uses within the entire Trinidad Planning Area. The area surrounding the project site is already subdivided and developed for residential uses. This subdivision and the development of one additional residence would not affect future agricultural uses in the area.

3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?		X		

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?		X		
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?				X

3. a), b), c): AIR QUALITY: *LESS THAN SIGNIFICANT WITH MITIGATION*

FINDING: With the proposed mitigation, the proposed subdivision will not conflict with or obstruct implementation of the applicable air quality plan; will not violate any air quality standard or contribute substantially to an existing or projected air quality violations; will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

DISCUSSION:

- a) The project site is located in Humboldt County, which lies within the North Coast Air Basin (NCAB). The NCAB extends for 250 miles from Sonoma County in the south to the Oregon border. The climate of NCAB is influenced by two major topographic units: the Klamath Mountains and the Coast Range provinces. Although minimal dust can be expected at the time of the construction of the future home and during the road improvements, these impacts will be minor and temporary in nature. The project will not increase emissions affecting air quality in the long term. Also see discussion under 'b' below.
- b) The North Coast Unified Air Quality Management District (NCUAQMD) is responsible for monitoring and enforcing local and state air quality standards. Air quality standards are set forth for emissions that may include, but are not limited to: visible emissions, particulate matter, and, fugitive dust. Pursuant to Air Quality Regulation 1, Chapter IV, Rule 400 – *General Limitations*, a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which endanger the comfort, repose, health or safety of any such person or the public or which cause or have a natural tendency to cause injury or damage to business or property. Visible emissions include emissions which are visible to the naked eye, such as smoke from a fire. This project will not include any source of visible emissions, including those from intentional fire/burn.

With regard to particulate matter, all of Humboldt County has been designated by the California State Air Quality Board as being a “non-attainment” area for PM-10 (particulate matter less than ten micrometers in diameter). PM-10 emissions include smoke from wood stoves, airborne salts, and other particulate matter naturally generated by ocean surf. In part because of the large number of wood stoves in Humboldt County, and the generally heavy surf and high winds, the County has exceeded the state standard for PM-10 emissions. Therefore, any use or activity that generates unnecessary airborne particulate matter may be of concern to the

NCUAQMD. To reduce potential particulate matter impacts, a mitigation measure will be incorporated into the project which requires compliance with Air Quality Regulation 1, Chapter IV, Rule 430 (see Mitigation No. 1 below).

Pursuant to Air Quality Regulation 1, Chapter IV, Rule 430 – *Fugitive Dust Emissions*, the handling, transporting, or open storage of materials in such a manner which allows or may allow unnecessary amounts of particulate matter to become airborne, shall not be permitted. Reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including, but not limited to the following provisions: (1) Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust and (2) the use of water for control of dust in the removal of existing improvements, construction operations, the grading of roads and the clearing of land.

Further, the NCUAQMD has advised that relatively small construction projects, such as the one proposed, do not generate particulate matter greater than the local and/or state standard. Therefore, with the mitigation measure listed below, which requires compliance with NCUAQMD standards and regulations, the project will not result in adverse air quality impacts, nor result in a cumulatively considerable increase in the PM-10 non-attainment.

The proposed subdivision and resulting single-family development will generate very small amount of additional traffic. More than 5,000 vehicle trips would have to be generated to reach the NCUAQMD's significance criteria of 15 tons of PM-10 per year. A slight increase in vehicular exhaust levels from the creation of one additional residential parcel and subsequent development will not have an adverse impact on air quality.

c) See b) above.

MITIGATION MEASURE NO. 1 – AIR QUALITY

- b) Subsequent short-term construction will include the following measures: The applicant, at all times shall comply with Air Quality Regulations to the satisfaction of NCUAQMD. The following temporary dust control measures, as described in detail within in the California Storm Water Best Management Construction Activity Handbook, developed by Camp, Dresser & McKee, *et al.* for the Storm Water Quality Task Force, shall be used during construction: *Dust Control* (ESC21). This will require (1) covering open bodied trucks when used for transporting materials likely to give rise to airborne dust; and (2) the use of water for the control of dust in construction operations, the grading of roads or the clearing of land.
- c) Construction waste or debris shall not be burned on the project site under any circumstances. Vegetation waste shall not be burned except under conditions established by permit from the North Coast Unified Air Quality Management District.

Responsibility: NCUAQMD & Applicant; City Building Official to respond if observed during site inspections or in response to notification from public. City Building Official to notify contractor how and when work can resume.

3. d), e): AIR QUALITY: NO IMPACT

FINDING: The proposed subdivision will not expose sensitive receptors to substantial pollutant concentrations; and will not create objectionable odors affecting a substantial number of people.

DISCUSSION:

- d) There are no known sensitive receptors near the project site; the surrounding area is developed with single-family residence.
- e) The construction of one single family residence does not have the potential to create objectionable odors that could affect a substantial number of people.

4. BIOLOGICAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

4. a), b), d): BIOLOGICAL RESOURCES – LESS THAN SIGNIFICANT IMPACT

FINDING: The proposed subdivision will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; have a substantial adverse effect on any riparian

habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

DISCUSSION:

- a) There is no evidence that the construction of a single family residence will have a substantial adverse effect on any special status species. The project site lacks habitat for such species that may occur in the area such as Spotted Owls, cliff swallow or salmonids. McConnahas Mill Creek, which supports resident cutthroat trout, is located on Parcel 2, more than 800 to the southeast of the proposed development. The project is consistent with existing laws and regulations protecting these species. The CA Dept. of Fish and Game had no comments in response to the referral that was sent to them regarding this project.
- b) The only riparian habitat (McConnahas Mill Creek) is located near the southerly portion of the project site, more than 800 feet southeast of the proposed development. The proposed subdivision and future development will not affect the creek. Current Trinidad land use regulations do not allow development, including vegetation removal within 100' of the creek.
- d) Other than the riparian corridor, located more than 800 feet from the proposed property line of Parcel 1, there is not expected to be any significant migration corridors through the site due to existing development in and around the project area. Due to the distance to the creek, the proposed project will not impact that corridor. Species that do currently utilize other portions of the site would already be accustomed to low-density residential disturbances.

4. c), e), f): BIOLOGICAL RESOURCES – NO IMPACT

FINDING: The proposed subdivision will not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means; will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

- c) There are no wetlands on the project site.
- e) Future development will be required to meet the requirements of any existing ordinance or policies protecting biological resources through the City's permitting process.
- f) The project area is not subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5. CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?		X		

5. a), b): CULTURAL RESOURCES – NO IMPACT

FINDING: The proposed subdivision will not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5; and will not directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature.

DISCUSSION:

- a) Existing structures include two residences and their accessory structures, none of which are considered a significant historical resource, nor are there any known resources in the area that meet the criteria as defined in §15064.5.
- c) The site contains no known paleontological resources and there are no visible unique geological features. Due to the unstable and geologically recent origin of the marine terrace upon which the project is located, there is minimal potential for these resources to exist on the site.

5. b), d): CULTURAL RESOURCES – LESS THAN SIGNIFICANT WITH MITIGATION

FINDING: With mitigation incorporated, the proposed subdivision does not have the potential to cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 or to disturb any human remains, including those interred outside of formal cemeteries. With the mitigation proposed any potential impacts can be reduced to a less than significant level.

DISCUSSION:

- b) The site contains no known archaeological resources which meet the criteria as defined in §15064.5. In response to a referral sent regarding this project, the North Coastal Information Center had no concerns and recommended approval. However, there are known cultural resources in the vicinity of the project. Therefore, mitigation has been included that protects any archeological resources should they be found onsite during future construction.
- d) Although there are no known cemeteries or burial grounds within the project site, there exists the possibility that during ground disturbing activities, human remains may be discovered. It is

impossible to determine if a site contains subsurface human remains, but with the proposed mitigation appropriate controls are in place in the event that remains are encountered.

MITIGATION MEASURE NO. 2 – CULTURAL RESOURCES

- b) Should archaeological materials be encountered during construction or grading operations, all ground-disturbing work shall be temporarily halted or shifted to another area. Work near the archeological finds shall not be resumed until a qualified archeologist has evaluated the materials and offered recommendations for further action. Prehistoric materials which could be encountered include: obsidian or chert flakes or tools, locally darkened midden, groundstone artifacts, depositions of shell, dietary bone, and human burials.
- d) Should human remains be uncovered, State law requires that the County Coroner be contacted immediately. Should the Coroner determine that the remains are likely those of a Native American, the California Native Heritage Commission must be contacted. The Heritage Commission consults with the most likely Native American descendants to determine the appropriate treatment of the remains.

Responsibility: Applicant and contractor. City Building Official to respond if observed during site inspections or in response to notification from contractor or passerby. City Building Official to notify where and when work may resume.

6. GEOLOGY AND SOILS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.		X		
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		X		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
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6. a.i), c): GEOLOGY AND SOILS – LESS THAN SIGNIFICANT WITH MITIGATION

FINDING: With mitigation incorporated, the proposed subdivision will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving the rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; and will not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse

DISCUSSION:

- a.i) The proposed project is located within a mapped Alquist Priolo Earthquake Fault Special Studies area. An Evaluation for the Hazard of Surface Fault Rupture has been completed by LACO ASSOCIATES, dated February 7, 2007 the original report was reviewed and commented on for the City by SHN, Consulting Engineers and Geologists Inc in accordance the Fault Zoning Act and the CA Geological Survey Noe 49, Guidelines for Evaluating the Hazard of Surface Fault Rupture. The final LACO report has been forwarded to SHN for their final approval, which must be received prior to recordation of the subdivision map. Suitable building area has been determined to exist on the property. The report recommendations shall be required to be met as part of any future development and are included as mitigation herein.
- c) Although unstable soils were not expected to occur on the site, other than within the bluff slope areas, an R-1 Engineering Geologic Soils Report was completed BY LACO, dated February 7, 2006 in conjunction with the fault hazard study. Some topsoil unsuitable for building foundations was found. The report recommendations shall be required as part of any future development.

MITIGATION MEASURE NO. 3 - Geologic Report Recommendations

- a.i) All recommendations of the LACO Evaluation for the Hazard of Surface Fault Rupture report, as approved by SHN, shall be incorporated into the project design and will be required as conditions of approval for future development:
- 1 – 3 are conclusions / findings;
 4. We recommend that the buildable area on the newly proposed parcel consist of an area whose boundary begins 50 feet west of the east (upslope) end of the trench and extending to the western property boundary (Figure 4). The entire area to the west of the eastern boundary delineating the buildable zone has, in our opinion, been demonstrated to be free from the hazard of surface fault rupture. The easterly boundary of the buildable area is oriented such that it projects northward and southward from our trench location across the parcel with an azimuthal trend of 328° (parallel to the trend of the reported mapped trace of the Trinidad Fault where it crosses the subject parcel).
 5. It is recommended that the eastern boundary of the buildable zone be staked in the field by the current property owner's consulting surveyor such that it is clearly defined and recognizable to any future owner(s).

6. It is recommended that no buildings be constructed across the uncompacted backfilled exploratory trench due to the potential for settlement to adversely affect the foundation of any structure built across the trench. Future owners proposing to erect any structure across the trench should retain the services of a qualified licensed professional engineer to design an appropriately engineered foundation to mitigate the potential for settlement.
- c) All recommendations of the LACO R-1 Engineering Geologic Soils Report shall be incorporated into the project design and will be required as conditions of approval for future development:

Site Specific Recommendations

Building Site

Based on our fault hazard investigation study, we recommend a 150-foot wide "buildable area" for structures intended for human occupancy (Figure 5). Additional out buildings and any detached garages may be constructed outside of the cleared "buildable area". Additional fault studies will be necessary if residential structures are proposed for construction outside of the "cleared" area. We also recommend avoiding the placement of structures over the trench site. Soils within this location are disturbed to a depth of 10 to 12 feet and have not been suitably compacted for bearing structural loads. If construction over the trench site is desired, special mitigations will be necessary to bridge the unsuitable load-bearing materials.

The project site in general is underlain by 1.25 to 2.25 feet, or more, of unsuitable load bearing material consisting of soft, compressible soils. These soils should be completely excavated at the locations of any foundation elements. Any organic debris, or non-engineered fill, which may be encountered within the foundation and footing excavations should be excavated and replaced with either gout slurry or engineered fill, suitably compacted, and tested as described in this document. Areas surrounding the new construction should be graded to drain by sheet flow away from all building foundations with a uniform slope of one to two percent.

Foundation Design

No preliminary foundation designs were provided to us by the client. We anticipate that the preferred foundation system for any proposed structures would consist of standard reinforced concrete continuous perimeter and isolated interior footings. Such foundation systems are acceptable for use on this site, as are thickened-edge, slab-on-grade foundations, provided that the foundations are designed by an experienced engineer or architect in accordance with the current edition of the CBC and embedded into the suitably firm, undisturbed native soils below the topsoil.

The native soils on the project site are classified as silt with sand (ML). For design purposes, a conservative soil bearing capacity of 1,500 pounds per square foot (psf) for dead load plus long-term live load may be used for foundation elements founded in the undisturbed native silty sandy soils below the topsoil (1.5 to 2.5 feet bgs). For short-term live loads (wind and seismic), the bearing capacity may be increased to 2,000 psf.

To reduce the possibility of moisture migration through concrete floor slabs (if utilized), a plastic membrane (vapor retarder) should be placed on the prepared subgrade. To protect the membrane during steel and concrete placement, and to provide for a better concrete finish, sandwich the membrane within 2 inches of clean sand. Joints between the sheets and utility piping openings should be lapped and taped. Care should be taken during construction to protect the plastic membrane against punctures.

General Recommendations

Site Preparation

Earthwork (grading and excavations) should proceed during the dry season, which is generally between April and October. All debris, tree stumps, and vegetation should be removed from within 5 feet of the building footprint and disposed of appropriately. Topsoil and soft subgrade soils should be removed from driveways, roadways, parking areas, and from foundation excavations. Topsoil and soft subgrade so removed should be disposed of or stockpiled on-site for later use as landscaping or non-structural fill.

Structural Fills

With the exception of landscaping fills, which should in general be select topsoil, all fill materials should be well graded, imported granular material such as crushed quarry rock or river-run gravels (100 percent passing 3-inch sieve). Native soils on the site may be suitable for use as structural fill, but to assure their suitability, they should be analyzed in the LACO materials testing laboratory prior to use. Structural fill should be placed on a suitably prepared subgrade surface and should be compacted mechanically so that no settlement will occur. Structural fills should be compacted as specified in *Compaction Standard* (below), to at least 90 percent relative compaction (RC) under all foundation elements, driveways, parking areas, and patios.

Approved fill material should be placed on flat surfaces cut into firm undisturbed native soils, and should be placed in loose lifts no more than 8 inches thick at a uniform moisture content at or near optimum. Structural fill should be compacted mechanically. Sufficient testing and inspection should be performed to assure compliance with the recommended compaction standards. Samples of proposed native or imported fill should be submitted to the LACO materials testing laboratory for assessment at least 48 hours prior to placement or importing to the site (whichever is soonest). Organic materials should not be permitted in any fills. Rocks with a dimension greater than 3 inches should not be placed in any fills. All bare ground surfaces generated as a result of cutting and filling should be promptly revegetated to limit surface erosion.

Compaction Standard

Materials processed in-place and utilized as compacted fill under footings, foundations, driveways, sidewalks, and parking areas should be based on ASTM D-2922 *in-situ* measurement of dry unit weight. Maximum dry unit weight should be determined using ASTM Laboratory Test Method D-1557.

Utility Trench Backfill

Backfill and compaction of utility trenches in, and immediately adjacent to, building pads, driveways, parking, and other flatwork areas should be such that no settlement will occur. Backfill materials for all trenches should be placed in loose lifts not exceeding 8 inches and should be compacted to at least 90 percent RC. Sand or other approved granular material used for backfill should be placed at near-optimum moisture content and compacted mechanically. Flooding of granular material should never be employed to consolidate backfill in trenches.

Where, or if, utility trenches closely parallel a footing, and the trench bottom is within a 2 horizontal to 1 vertical plane, projected outward and downward from any structural element, grout slurry should be utilized to backfill that portion of the trench below this plane. The use of slurry backfill is not required where a narrow trench crosses a footing at or near a right angle.

Drainage

The grading or landscaping design and construction should be such that no water is allowed to pond anywhere on the site, nor to migrate beneath structures. All roof storm drainage should be controlled with the installation of gutters and downspouts. Downspouts should be connected to tightlines to convey roof storm runoff away from the structure to suitable outlet points that will allow drainage where no erosion will occur. To control erosion, energy dissipaters should be installed at the outlet points of all tightlines draining on soil areas. The final grading plan should include provisions to slope the ground surface away from the building at 1 to 2 percent such that all runoff flows away from structure foundations.

OBSERVATION AND TESTING

Grading and construction at the site should be performed in accordance with the code requirements of the City of Trinidad, Humboldt County, the 2001 edition of the CBC, and the recommendations contained within this report. The authors should review the grading and foundation plans for any future developments to assure compliance with the recommendations of this report. Foundation excavations should be reviewed and approved by a representative from LACO prior to the placement of any forms, reinforcing steel, or concrete to assure that all foundation elements are placed on firm, undisturbed mineralized native soil of suitable bearing capacity, as recommended in this report.

Responsibility: City Building Official will verify that the building plans meet the recommendations prior to issuing building permits and will ensure that such buildings are constructed to meet those recommendations and the Uniform Building Requirements and standards prior to issuance of a Certificate of Occupancy.

6. a.ii), a.iii), a.iv), b): GEOLOGY AND SOILS – LESS THAN SIGNIFICANT IMPACT

FINDING: The proposed subdivision will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: strong seismic ground shaking, seismic related ground failure, including liquefaction, or landslides. The project will not result in substantial soil erosion or the loss of topsoil.

DISCUSSION:

- a.ii) The entire region is at risk of strong ground shaking. However, existing standards in the Uniform Building Code for Seismic Zone IV will ensure that any potential impacts are less than significant.
- a.iii) The project site is not located within an area designated as having the potential for liquefaction. The soils investigation did not identify any liquefaction potential.
- a.iv) The project site is located in an area of moderate to low slope instability per Plate III of the Seismic Safety Map, Humboldt Bay and Vicinity, North Sheet and, other than the steep bluff faces, has not been designated as 'unstable' or of 'questionable stability' on Plate 3 of the Trinidad General Plan. The building site is located on generally flat land. The City of Trinidad Zoning Ordinance requires a 30 foot setback from bluffs, minimizing the potential for landslides resulting from future development.
- b) The proposed building site is located on generally flat land, minimizing the risk of erosion. Standard conditions of approval to control erosion and reduce sediment loss will be included as part of the future construction.

6. d) – e): GEOLOGY AND SOILS – NO IMPACT

FINDING: The project will not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; and will not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

DISCUSSION:

- d) Referral comments did not indicate the proposed project would be located on expansive soils, as defined in Table 18-1-B of the UBC (1994) and the Geologic Soils Report prepared by LACO confirmed this.
- e) The parcel is served with community water. Soil testing indicated that there is suitable area for a primary and 100% reserve leachfield area to serve future development. The Health Dept. did not respond to a referral that was sent to them regarding this project. The City of Trinidad will require an approved sewage disposal permit from the Health Department as part of any future application for development.

7. HAZARDS AND HAZARDOUS MATERIALS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X

g) Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized area or where residences are intermixed with wildlands?			X	

7. a), c), d), e), f) g): HAZARDS AND HAZARDOUS MATERIALS – **NO IMPACT**

FINDING: The proposed subdivision would not create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials; the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; the project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment; will not be located within an airport land use plan or; and will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

DISCUSSION:

- a) The proposed subdivision and future development, consisting of single-family residential use, will not involve routine transport, use or disposal of hazardous materials.
- c) The project site is not located within one-quarter mile of an existing or proposed school. The closest school is Trinidad Elementary, located approximately 1,800 ft. from the project site, which will not generate or utilize hazardous materials.
- d) The project site is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.
- e) The project is not located within an airport land use plan or within two miles of a public airport. The closest airport is located approximately 8 miles to the south in McKinleyville.
- f) The project is not located within the vicinity of a private airstrip.
- g) No activity or development is proposed which would interfere with an adopted emergency response plan or emergency evacuation plan. The area is already developed with residential uses and served by emergency response personnel. No new roads or barriers will be constructed.

7. b), h): HAZARDS AND HAZARDOUS MATERIALS – **LESS THAN SIGNIFICANT IMPACT**

FINDING: The proposed subdivision would not create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment; and will not expose people or structures to any potential impact in terms of risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

DISCUSSION:

- b) The types of activities proposed do not involve the transport, use or disposal of hazardous materials (solvents, fuels, etc.). Small amount of household chemicals are anticipated to be used and stored onsite once future development occurs. However, the types and amounts of these substances associated with residential use do not pose a significant hazard.
- h) The project area is not designated as wildlands and has a low fire risk rating. However, timber and ranch lands are located nearby to the project, and the existing low-density, rural residential neighborhood contains vegetation that could be flammable. However, the proposed residential use will not significantly increase the existing risks. The area is served by the CA Dept. of Forestry and Fire Protection.

8. HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?				X

i) Expose people or structures to a significant risk or loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Result in inundation by seiche, tsunami, or mudflow?				X

8. a), b), c), d), e), f): HYDROLOGY AND WATER QUALITY – LESS THAN SIGNIFICANT IMPACT

FINDING: The proposed subdivision will not violate any water quality standards or waste discharge requirements; will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted); will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site; will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site; will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; and will not otherwise substantially degrade water quality;

DISCUSSION:

- a) The construction of one single family residence will not generate a measurable increase in waste discharge and will not violate any standards. Future development will be located on a relatively large (2-acre) lot and will include the installation of a modern septic system meeting the current requirements of the Regional Water Quality Control Board and Humboldt County Division of Environmental Health that are designed to protect water quality and public health.
- b) The City of Trinidad will supply water to the proposed parcel; therefore, groundwater supplies will not be interfered with or depleted. The minimal amount of impervious surfaces resulting from future residential construction will not interfere with groundwater recharge, particularly since the soils onsite are fairly coarse.
- c) The proposed project will not result in the alteration of a drainage course; there are no drainage courses or creeks on proposed Parcel 1. The construction of one single family residence and a driveway will slightly alter the existing drainage pattern, but impacts due to erosion and siltation on- or off-site will be less than significant and will be controlled through project specific conditions of approval once future development is proposed.
- d) The project site slopes gently to the south and west toward Scenic Drive, but the amount of runoff generated from the construction of one residence will be less than significant. There will be a slight increase in impervious surface due to the construction of one residence and a driveway; however, on a site of 2.0 acres with coarse soils, the impact will be less than significant.

- e) The minimal amount of impervious surfaces created by future construction of one residence will not impact any off-site stormwater drainage systems.
- f) With existing standards and current requirements for future building approvals, the proposed subdivision, with the future construction of a single-family residence does not have the potential to significantly degrade water quality.

8. g), h), i), j): HYDROLOGY AND WATER QUALITY – NO IMPACT

FINDING: The proposed subdivision will not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map; will not place, within a 100-year flood hazard area, structures which would impede or redirect flood flows; will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; and will not result in inundation by seiche, tsunami, or mudflow.

DISCUSSION:

- g) According to the Flood Insurance Rate Map Panel #450, the project site is located in Flood Zone C, which is defined as “areas of minimal flooding”, and is outside the 100- and 500-year floodplains. The topography and elevation of the site preclude the potential for flooding.
- h) See ‘g’ above.
- i) See ‘g’ above. The site is not located downstream of any levee or dam and is not within a mapped dam or levee inundation area.
- j) The project is outside the areas subject to tsunami run-up. The proposed house site is at ± 220’ in elevation above mean sea level.

9. LAND USE AND PLANNING. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?		X		
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

9. a), c): LAND USE AND PLANNING – NO IMPACT

FINDING: The proposed subdivision will not physically divide an established community; and the proposed project will not conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan.

DISCUSSION:

- a) The project will infill the existing development plan and is consistent with existing, surrounding development. Therefore, the project does not have the potential to physically divide an existing community.
- c) There are no applicable Habitat Conservation Plans or Natural Community Conservation Plans affecting the project site.

9. b): LAND USE AND PLANNING – LESS THAN SIGNIFICANT WITH MITIGATION

FINDING: With mitigation incorporated, the proposed project will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

DISCUSSION:

- b) The project site is designated Suburban Residential within the City of Trinidad and Residential Estates within the County of Humboldt. The project is zoned Suburban Residential within the City and Residential Single Family within the County. All plan designations and zoning specify a minimum parcel size of 20,000 square feet, although the County Division of Environmental Health generally requires a minimum lot size of one-acre when onsite disposal is utilized. However, the proposed parcels resulting from the subdivision will be approximately two and 10.7 acres. Residential development is a primary and compatible use in both zoning districts. However, due to the likelihood of future annexation of the entire parcel by the City of Trinidad, and the differences in development standards, mitigation has been incorporated requiring all human occupied structures to be located within the City limits of Trinidad.

MITIGATION MEASURE NO. 4 – LAND USE

- b) All human occupied structures shall be located within the City limits of the City of Trinidad. If there is any question, it will be the property owner's responsibility to document that the development is within City limits through survey information or other means.

Responsibility: Current and future property owners. Building Official to confirm human occupied structures are within City limits as part of future building permit application(s).

10. MINERAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

10. a), b): MINERAL RESOURCES – NO IMPACT

FINDING: The proposed subdivision will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; and will not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

DISCUSSION:

- a) The project does not involve the extraction of mineral resources; no known mineral resources existing on the site.
- b) The project site is not, nor adjacent to, a locally important resource recovery site delineated on a local general plan, specific plan or other land use plan.

11. NOISE. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Expose persons to or generate excessive ground borne vibration or ground borne noise levels?			X	
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

11. a), b), d): NOISE – LESS THAN SIGNIFICANT IMPACT

FINDING: The proposed subdivision will not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; will not expose persons to or generate excessive groundborne vibration or

groundborne noise levels; and will not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

DISCUSSION:

- a) The project is located within a residential area and the project is consistent with the planned build out of the area. Temporary construction activities may result in periodic noise generation, but such impacts will be minor and temporary in nature.
- b) No vibrations or groundborne noise level increases are expected by the project. Temporary construction activities may result in periodic noise generation, but such impacts will be minor and temporary in nature.
- d) The impact would be less than significant because such increases would only be short term, lasting only the length of time required to construct one single family residence. This is consistent with surrounding development.

11. c), e), f): NOISE – NO IMPACT

FINDING: The proposed subdivision will not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; will not, for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels; and will not, for a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

DISCUSSION:

- c) Any potential noise increases due to future construction resulting from this project will be temporary in nature. A single-family residence will not significantly increase ambient noise levels above existing residential development.
- e) The project is not located within two miles of a public airport.
- f) The project is not located in the vicinity of a private airstrip.

12. POPULATION AND HOUSING. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and/or businesses) or indirectly (e.g., through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
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12. a): POPULATION AND HOUSING – LESS THAN SIGNIFICANT IMPACT

FINDING: The proposed subdivision will not induce substantial population growth in an area, either directly (e.g. by proposing new homes or businesses) or indirectly (e.g., through extension of roads or other infrastructure).

DISCUSSION:

- a) The project is consistent with the residential density allowed by the general plan and zoning ordinance for both the City and the County. The construction of one single family residence does not have the potential to induce measurable population growth and does not in itself constitute significant population growth.

12. b), c): POPULATION AND HOUSING – NO IMPACT

FINDING: The proposed subdivision will not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and will not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

DISCUSSION:

- b) The project is infill development and will not displace any existing housing. The proposed new lot is currently vacant.
- c) See 'b' above.

13. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?			X	
d) Parks?			X	
e) Other public facilities?			X	

13. a), b), c), d), e): PUBLIC SERVICES – LESS THAN SIGNIFICANT IMPACT

FINDING: The proposed subdivision will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or

physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, other public facilities.

DISCUSSION:

- a) The proposed subdivision is within the planned build out of the City's and County's General Plans. Although the parcel will be served primarily by the City of Trinidad, there is a mutual aid agreement between the City and County for first response. The increase of one additional single-family parcel will not result in significant impacts to public services. The resulting increase in demand would be within the capabilities of the existing infrastructure and services, per agency comments. All of the public service agencies have either recommended approval or conditional approval of the project, or had no comment in response to referrals that were sent both by the County of Humboldt and City of Trinidad. No issues were identified with regard to the provision, construction or maintenance of public services. The Department finds no evidence that the project will result in a significant adverse impact on public services.
- b) See a) above.
- c) See a) above.
- d) See a) above.
- e) See a) above.

14. RECREATION. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

14. a): RECREATION – LESS THAN SIGNIFICANT IMPACT

FINDING: The proposed subdivision will not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

DISCUSSION:

- a) The increase in use of neighborhood and regional parks due to the construction of one residence will have a less than significant impact due to the small scale of the proposed development and the proximity of numerous beach trails and other recreational opportunities.

14. b): RECREATION – NO IMPACT

FINDING: The proposed subdivision will not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

DISCUSSION:

- b) No recreational facilities are proposed as a part of this project.

15. TRANSPORTATION/TRAFFIC. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			X	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e) Result in inadequate emergency access?				X
f) Result in inadequate parking capacity?				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

15. a), b): TRANSPORTATION / TRAFFIC – LESS THAN SIGNIFICANT IMPACT

FINDING: The proposed subdivision will not cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections); and will not exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.

DISCUSSION:

- a) The proposed development will be accessed from Lanford Road and Scenic Drive, both County maintained roads improved to at least 20 feet in width. Scenic Drive serves the Trinidad Rancheria Casino, many residences and is a popular drive for tourists. Lanford Road serves other neighboring residential development. The addition of a future residence will not have a measurable impact on existing traffic patterns on Scenic Drive, Lanford Road or their intersection.
- b) The intersection of Scenic Drive and Lanford Road has an adequate level of service and is not yet near capacity. The future development resulting from the creation of one additional lot will not significantly affect this intersection.
- d) No new road construction is proposed as a part of this project and will not be required for future development. A new driveway that meets current standards and specifications will be constructed. An encroachment permit will be required from the County for any work within the public right-of-way, including the new driveway access, and detailed specifications will be addressed at that time.

15. a) – g): TRANSPORTATION/TRAFFIC – NO IMPACT

FINDING: The proposed subdivision will not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; will not substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); will not result in inadequate emergency access; will not result in inadequate parking capacity; and will not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

DISCUSSION:

- c) The proposed subdivision and future development will not generate a measurable increase in air traffic.
- e) Lanford Road and Scenic Drive have adequate emergency access. A new driveway that meets current standards and specifications will be constructed.
- f) There is no existing parking problem. The proposed additional parcel is 2.0 acres, with ample room to accommodate required parking at the time of future development approval(s).
- g) The creation of one additional lot and the future construction of one single family residence will not conflict with adopted policies, plans, or programs supporting alternative transportation.

16. UTILITIES AND SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have insufficient water supplies available to serve the project from existing entitlements and resources (i.e., new or expanded entitlements are needed)?			X	
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
f) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Violate any federal, state, and local statutes and regulations related to solid waste?			X	

16. a), b), c), d), e), f), g): UTILITIES AND SERVICE SYSTEMS – LESS THAN SIGNIFICANT IMPACT

FINDING: The project will not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; or require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. The project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or have insufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed; or result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; or be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or comply with federal, state, and local statutes and regulations related to solid waste.

DISCUSSION:

- a) The creation of one lot and subsequent construction of one single family residence will not exceed requirements of the applicable Regional Water Quality Control Board. Omsberg & Preston has completed testing and preliminary design of an appropriate on-site sewage disposal system which has been approved by the Humboldt County Department of Environmental Health.

- b) Future development will require a new water connection from a main line on Scenic Drive to be constructed to serve the project. Although another water main exists along Lanford Road, Humboldt County LAFCO will not allow the extension of water service outside City limits, so all the infrastructure must remain in City limits. A new septic system will also be constructed to serve the future residence. However, this is standard construction for residential development and the construction of these individual components will not cause significant environmental impacts.
- c) The proposed project will not necessitate the construction of any additional public storm water drainage facilities or expansion of existing utilities. It is not expected that future development will generate significant amounts of stormwater runoff, and the site is large enough that any stormwater would be expected to infiltrate onsite. Grading and drainage will be specifically addressed as part of future development approval(s).
- d) The proposed project will be provided water by the City of Trinidad, which has adequate water capacity to serve an additional parcel.
- e) See a) above.
- f) The project will facilitate the construction of one single-family home. Solid waste from the proposed development will be typical of low density residential development. The solid waste provider is Humboldt Sanitation, and ultimately, Humboldt Waste Management Authority's solid waste transfer station; both have the capacity to serve the project. The project will not produce products or by-products that violate any federal, state, and local statutes and regulations related to solid waste.
- g) See f) above.

17. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).			X	

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?			X	
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17. a), b), c): MANDATORY FINDINGS OF SIGNIFICANCE – *LESS THAN SIGNIFICANT IMPACT*

DISCUSSION: The proposed subdivision does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. The proposed subdivision will not have impacts that are individually limited, but cumulatively considerable. ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects). The proposed subdivision will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.

FINDINGS:

- a) Based on the project described in the administrative record, comments from reviewing agencies, a review of the applicable regulations, and as discussed and mitigated herein, the City finds there are no means by which the project would have the ability to significantly degrade the quality of the environment, reduce the habitat of fish or wildlife species or cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community or eliminate important examples of the major periods of California history or pre-history. The project has been designed to minimize potential adverse effects to biological resources. There is no evidence in the public record that the proposed subdivision will degrade the environment or reduce wildlife populations or negatively affect historic resources. Referral agencies, including but not limited to, DFG, California Coastal Commission, and NCIC provided approval or conditional approval of the project.
- b) Referral agencies did not identify any concerns regarding cumulative impacts resulting from the project. There is no evidence in the public record which indicates that the creation of one additional single-family parcel, and subsequent development, will have impacts that are individually limited, but cumulatively considerable.
- c) There is no evidence in the public record which indicates that the creation of one additional single-family parcel, and subsequent development, will have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.

18. Earlier Analysis

- a) Earlier Analyses Used. Trinidad Local Coastal Program, 1980; Trinidad Area Plan, Humboldt County Local Coastal Program, 1981
- b) Impacts Adequately Addressed. The effects from the above checklist were within the scope of and adequately analyzed in the documents listed above, pursuant to applicable legal standards.
- c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Incorporated," the following are mitigation measures, which were incorporated or refined from the documents described above.

MITIGATION MEASURES, MONITORING, AND REPORTING PROGRAM

Mitigation No. 1 – AIR QUALITY

- b) Subsequent short-term construction will include the following measures: The applicant, at all times shall comply with Air Quality Regulations to the satisfaction of NCUAQMD. The following temporary dust control measures, as described in detail within in the California Storm Water Best Management Construction Activity Handbook, developed by Camp, Dresser & McKee, *et al.* for the Storm Water Quality Task Force, shall be used during construction: *Dust Control* (ESC21). This will require (1) covering open bodied trucks when used for transporting materials likely to give rise to airborne dust; and (2) the use of water for the control of dust in construction operations, the grading of roads or the clearing of land.
- c) Construction waste or debris shall not be burned on the project site under any circumstances. Vegetation waste shall not be burned except under conditions established by permit from the North Coast Unified Air Quality Management District.

Timing for Implementation/Compliance: During construction or grading.

Person/Agency Responsible for Monitoring: NCUAQMD, Applicant and Building Official. City Building Official to respond if dust observed during site inspections or in response to notification from public. City Building Official to notify contractor how and when work can resume.

Monitoring Frequency: As needed.

Evidence of Compliance: Final Inspection of Building Permit.

Mitigation No. 2 – CULTURAL RESOURCES

- b) Should archaeological materials be encountered during construction or grading operations, all ground-disturbing work shall be temporarily halted or shifted to another area. Work near the archeological finds shall not be resumed until a qualified archeologist has evaluated the materials and offered recommendations for further action. Prehistoric materials which could be encountered include: obsidian or chert flakes or tools, locally darkened midden, groundstone artifacts, depositions of shell, dietary bone, and human burials.
- d) Should human remains be uncovered, State law requires that the County Coroner be contacted immediately. Should the Coroner determine that the remains are likely those of a Native American, the California Native Heritage Commission must be contacted. The Heritage Commission consults with the most likely Native American descendants to determine the appropriate treatment of the remains.

Timing for Implementation/Compliance: During construction or grading

Person/Agency Responsible for Monitoring: Applicant, contractor and Building Official. City Building Official to respond if observed during site inspections or in response to notification from contractor or passerby. City Building Official to notify where and when work may resume.

Monitoring Frequency: Throughout ground disturbing activities.

Evidence of Compliance: Final Inspection of Building Permit.

Mitigation No. 3 – GEOLOGY AND SOILS

a.i) All recommendations of the LACO Evaluation for the Hazard of Surface Fault Rupture report, as approved by SHN, shall be incorporated into the project design and will be required as conditions of approval for future development:

1 – 3 are conclusions / findings;

4. We recommend that the buildable area on the newly proposed parcel consist of an area whose boundary begins 50 feet west of the east (upslope) end of the trench and extending to the western property boundary (Figure 4). The entire area to the west of the eastern boundary delineating the buildable zone has, in our opinion, been demonstrated to be free from the hazard of surface fault rupture. The easterly boundary of the buildable area is oriented such that it projects northward and southward from our trench location across the parcel with an azimuthal trend of 328° (parallel to the trend of the reported mapped trace of the Trinidad Fault where it crosses the subject parcel).
5. It is recommended that the eastern boundary of the buildable zone be staked in the field by the current property owner's consulting surveyor such that it is clearly defined and recognizable to any future owner(s).
6. It is recommended that no buildings be constructed across the uncompacted backfilled exploratory trench due to the potential for settlement to adversely affect the foundation of any structure built across the trench. Future owners proposing to erect any structure across the trench should retain the services of a qualified licensed professional engineer to design an appropriately engineered foundation to mitigate the potential for settlement.

c) All recommendations of the LACO R-1 Engineering Geologic Soils Report shall be incorporated into the project design and will be required as conditions of approval for future development:

Site Specific Recommendations*Building Site*

Based on our fault hazard investigation study, we recommend a 150-foot wide "buildable area" for structures intended for human occupancy (Figure 5). Additional out buildings and any detached garages may be constructed outside of the cleared "buildable area". Additional fault studies will be necessary if residential structures are proposed for construction outside of the "cleared" area. We also recommend avoiding the placement of structures over the trench site. Soils within this location are disturbed to a depth of 10 to 12 feet and have not been suitably compacted for bearing structural loads. If construction over the trench site is desired, special mitigations will be necessary to bridge the unsuitable load-bearing materials.

The project site in general is underlain by 1.25 to 2.25 feet, or more, of unsuitable load bearing material consisting of soft, compressible soils. These soils should be completely excavated at the locations of any foundation elements. Any organic debris, or non-engineered fill, which may be encountered within the foundation and footing excavations should be excavated and replaced with either gout slurry or engineered fill, suitably compacted, and tested as described in this document. Areas surrounding the new construction should be graded to drain by sheet flow away from all building foundations with a uniform slope of one to two percent.

Foundation Design

No preliminary foundation designs were provided to us by the client. We anticipate that the preferred foundation system for any proposed structures would consist of standard reinforced concrete continuous perimeter and isolated interior footings. Such foundation systems are acceptable for use on this site, as are thickened-edge, slab-on-grade foundations, provided that the foundations are designed by an experienced engineer or architect in accordance with the current edition of the CBC and embedded into the suitably firm, undisturbed native soils below the topsoil.

The native soils on the project site are classified as silt with sand (ML). For design purposes, a conservative soil bearing capacity of 1,500 pounds per square foot (psf) for dead load plus long-term live load may be used for foundation elements founded in the undisturbed native silty sandy soils below the topsoil (1.5 to 2.5 feet bgs). For short-term live loads (wind and seismic), the bearing capacity may be increased to 2,000 psf.

To reduce the possibility of moisture migration through concrete floor slabs (if utilized), a plastic membrane (vapor retarder) should be placed on the prepared subgrade. To protect the membrane during steel and concrete placement, and to provide for a better concrete finish, sandwich the membrane within 2 inches of clean sand. Joints between the sheets and utility piping openings should be lapped and taped. Care should be taken during construction to protect the plastic membrane against punctures.

General Recommendations

Site Preparation

Earthwork (grading and excavations) should proceed during the dry season, which is generally between April and October. All debris, tree stumps, and vegetation should be removed from within 5 feet of the building footprint and disposed of appropriately. Topsoil and soft subgrade soils should be removed from driveways, roadways, parking areas, and from foundation excavations. Topsoil and soft subgrade so removed should be disposed of or stockpiled on-site for later use as landscaping or non-structural fill.

Structural Fills

With the exception of landscaping fills, which should in general be select topsoil, all fill materials should be well graded, imported granular material such as crushed quarry rock or river-run gravels (100 percent passing 3-inch sieve). Native soils on the site may be suitable for use as structural fill, but to assure their suitability, they should be analyzed in the LACO materials testing laboratory prior to use. Structural fill should be placed on a suitably prepared subgrade surface and should be compacted mechanically so that no settlement will occur. Structural fills should be compacted as specified in *Compaction Standard* (below), to at least 90 percent relative compaction (RC) under all foundation elements, driveways, parking areas, and patios.

Approved fill material should be placed on flat surfaces cut into firm undisturbed native soils, and should be placed in loose lifts no more than 8 inches thick at a uniform moisture content at or near optimum. Structural fill should be compacted mechanically. Sufficient testing and inspection should be performed to assure compliance with the recommended compaction standards. Samples of proposed native or imported fill should be submitted to the LACO materials testing laboratory for assessment at least 48 hours prior to placement or importing to the site (whichever is soonest). Organic materials should not be permitted in any fills. Rocks with a dimension greater than 3 inches should not be placed in any fills. All bare ground surfaces generated as a result of cutting and filling should be promptly revegetated to limit surface erosion.

Compaction Standard

Materials processed in-place and utilized as compacted fill under footings, foundations, driveways, sidewalks, and parking areas should be based on ASTM D-2922 *in-situ* measurement of dry unit weight. Maximum dry unit weight should be determined using ASTM Laboratory Test Method D-1557.

Utility Trench Backfill

Backfill and compaction of utility trenches in, and immediately adjacent to, building pads, driveways, parking, and other flatwork areas should be such that no settlement will occur. Backfill materials for all trenches should be placed in loose lifts not exceeding 8 inches and should be compacted to at least 90 percent RC. Sand or other approved granular material used for backfill should be placed at near-optimum moisture content and compacted mechanically. Flooding of granular material should never be employed to consolidate backfill in trenches.

Where, or if, utility trenches closely parallel a footing, and the trench bottom is within a 2 horizontal to 1 vertical plane, projected outward and downward from any structural element, grout slurry should be utilized to backfill that portion of the trench below this plane. The use of slurry backfill is not required where a narrow trench crosses a footing at or near a right angle.

Drainage

The grading or landscaping design and construction should be such that no water is allowed to pond anywhere on the site, nor to migrate beneath structures. All roof storm drainage should be controlled with the installation of gutters and downspouts. Downspouts should be connected to tightlines to convey roof storm runoff away from the structure to suitable outlet points that will allow drainage where no erosion will occur. To control erosion, energy dissipaters should be installed at the outlet points of all tightlines draining on soil areas. The final grading plan should include provisions to slope the ground surface away from the building at 1 to 2 percent such that all runoff flows away from structure foundations.

OBSERVATION AND TESTING

Grading and construction at the site should be performed in accordance with the code requirements of the City of Trinidad, Humboldt County, the 2001 edition of the CBC, and the recommendations contained within this report. The authors should review the grading and foundation plans for any future developments to assure compliance with the recommendations of this report. Foundation excavations should be reviewed and approved by a representative from LACO prior to the placement of any forms, reinforcing steel, or concrete to assure that all foundation elements are placed on firm, undisturbed mineralized native soil of suitable bearing capacity, as recommended in this report.

Timing for Implementation/Compliance: At the time of building permit application.

Person/Agency Responsible for Monitoring: Applicant and City Building Official. City Building Official will verify that the building plans meet the recommendations prior to issuing Building Permits and will ensure that such buildings are constructed to meet those recommendations and the Uniform Building Requirements and standards prior to issuance of a Certificate of Occupancy.

Monitoring Frequency: Once.

Evidence of Compliance: Issuance of Building Permit.

Mitigation No. 4 – LAND USE

- b) All human occupied structures shall be located within the City limits of the City of Trinidad. If there is any question, it will be the property owner's responsibility to document that the development is within City limits through survey information or other means.

Timing for Implementation/Compliance: At the time of building permit application.

Person/Agency Responsible for Monitoring: Current and future property owners. City Building Official to confirm human occupied structures are within City limits as part of future Building Permit application(s).

Monitoring Frequency: Once for each Building Permit.

Evidence of Compliance: Issuance of Building Permit(s).

Responsibility: Current and future property owners. Building Official to confirm human occupied structures are within City limits as part of future building permit application(s).

19. SOURCE/REFERENCE LIST: The following documents were used in the preparation of this Initial Study. The documents are available for review at the Humboldt County Community Development Department and / or Trinidad City Hall, or staff offices, during regular business hours.

- 1) Omsberg and Preston, *Tentative Map for Ray Knapp*, Nov. 2006
- 2) LACO Associates, *Evaluation for the Hazard of Surface Fault Rupture*, Feb. 2007.
- 3) LACO Associates, *R-1 Engineering Geologic Soils Report*, Oct. 2006.
- 4) SHN Consulting Engineers and Geologists, Inc., *Technical Review of Report Entitled "Evaluation for the Hazard of Surface Fault Rupture, Knapp Subdivision, 80 Langford Road, Trinidad, California, APN: 042-141-001 and 515-151-022" dated September 28, 2006, by LACO Associates*, Dec. 2006.
- 5) Omsberg and Preston, *Sewage Disposal Testing for Proposed Lot Split Subdivision for Ray Knapp Landford Road, Trinidad (APN 515-151-022 and 042-141-001)*, May 2005.

In addition to the aforementioned documents, the following documents and correspondence are available for viewing at the Trinidad City Hall and are cited as providing information supporting this initial environmental evaluation and are hereby incorporated by reference:

- 1) File information includes application documents, referral responses and correspondence.